

2SA812 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.2 \text{ W (Tamb=25°C)}$$

Collector current

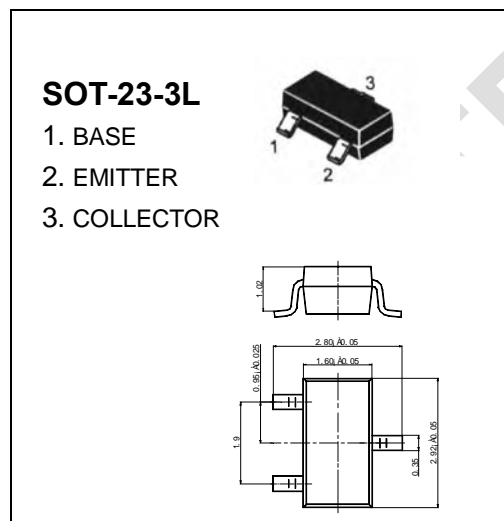
$$I_{CM} : -0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -60 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg} : -55°C \text{ to } +150°C$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--------------------------------------|-----|-----|-------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$ | -60 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$ | -50 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -100\mu A, I_C = 0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -60 \text{ V}, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5V, I_C = 0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = -6V, I_C = -1mA$ | 90 | | 600 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100 \text{ mA}, I_B = -10mA$ | | | -0.3 | V |
| Base-emitter voltage | V_{BE} | $I_C = -1mA, V_{CE} = -6V$ | | | -0.68 | V |
| Transition frequency | f_T | $V_{CE} = -6V, I_C = -10mA$ | 180 | | | MHz |

CLASSIFICATION OF h_{FE}

| Marking | M4 | M5 | M6 | M7 |
|---------|--------|---------|---------|---------|
| Range | 90-180 | 135-270 | 200-400 | 300-600 |